

## DETAILED ACTION

### *Specification*

1. The disclosure is *objected to* because of the following informalities:

On page 6, line 20 recites "*Figures 9 and 10*" which is incorrect and should be  
-- Figure[[s]] 9 ~~and 10~~ -- {*Fig. 10 does not exist in the drawings*}

### *Drawings*

2. The drawings are *objected to* as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference characters mentioned in the written description: "22" (coupling socket) and "30" (axially aligned apertures).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Claim Objections*

3. **Claims 1, 3-5 and 10-20** are *objected to* because of the following informalities:

Claim 1 (should be amended as follows to improve and clarify the claim language)

- 1. A hitch assembly consisting essentially of:

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(a) a coupling tongue with a first end and a second end, further comprising a first aperture sized to engage a coupling pin at the first end, and a second aperture sized to engage a hitch pin at the second end;

(b) a U-shaped clevis with a first clevis end and a second clevis end, that is substantially flat in cross section and ~~that~~ consists of an aperture at the first clevis end and the second clevis end, said U-shaped clevis being pivotally coupled to the second end of the coupling tongue with the hitch pin, and

(c) an opening formed by the coupling tongue and the U-shaped clevis, sized to receive a towing member. --

#### Claims 3-5

(Line 2): "the clevis" should be -- the U-shaped clevis --

#### Claims 10 and 11

(Line 1): "the clevis" should be -- the U-shaped clevis --

#### Claims 12-14

(Line 1): "tongue and clevis" should be -- tongue and the U-shaped clevis --

#### Claims 15-20

(Line 4): "(b) mounting the hitch assembly into a receiver *of* one of" should be

-- (b) mounting the hitch assembly into a receiver ~~[[of]]~~ on one of --

(Line 6): "*the* opening of the hitch assembly" should be -- ~~[[the]]~~ an opening of the hitch assembly --

### ***Claim Rejections - 35 USC § 102***

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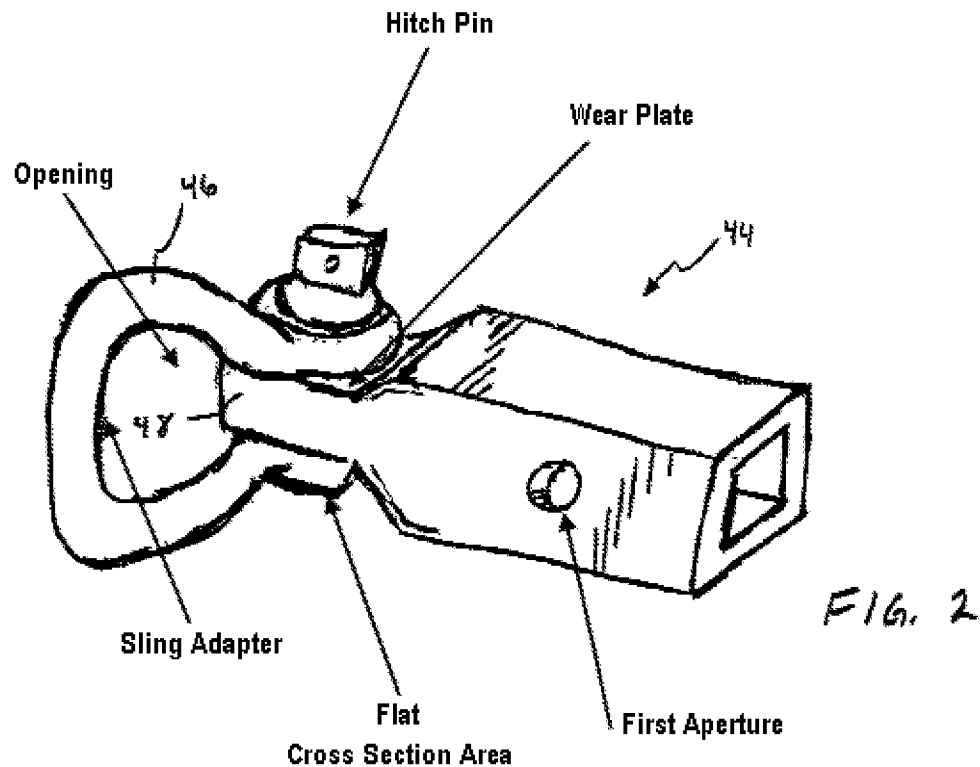
4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1, 3-5, 15 and 17** are rejected under 35 U.S.C. 102(b) as being anticipated by Lloyd, U.S. Patent Application Publication No. 2002/0140206.

Lloyd discloses a hitch assembly [*adapter*] (44) [see included Fig. 2 below] for mounting into a hitch receiver (21) of a tow vehicle (Fig. 1) in order to tow a vehicle in need of towing, the hitch assembly (44) consisting essentially of: a coupling tongue [*elongate bar*] with a first end and a second end, the first end being received in the hitch receiver (21), the coupling tongue further comprising a first aperture sized to engage a coupling pin (31) (Fig. 1) at the first end, and a second aperture sized to engage a hitch pin at the second end; a U-shaped clevis [*D-ring*] (46) with a first clevis end and a second clevis end, that is substantially flat in cross section and consists of an aperture at the first clevis end and the second clevis end, the U-shaped clevis (46) being pivotally coupled to the second end of the coupling tongue with the hitch pin, and an opening formed by the coupling tongue and the U-shaped clevis (46), sized to receive a towing member [*i.e. ropes, chains and straps*] {Para [0030], Lines 3-5} that is also attached to the vehicle being towed; a wear plate [*mounting plate*] (48) located at both ends of the U-shaped clevis (46); and a sling adapter [*inner surface of U-shaped clevis (46) for contacting and bearing the load from the towing member*] being disposed in the U-shaped clevis (46) of the hitch assembly (44).



***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 6-12, 14, 18 and 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Lloyd in view of Powell, U.S. Patent No. 6,129,371.

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Lloyd discloses what is discussed above, but *fails to specifically disclose* the hitch assembly (44) being entirely or partially comprised of aluminum alloy [*i.e. the U-shaped clevis and coupling tongue comprising aluminum alloy or one of the U-shaped clevis and coupling tongue comprising aluminum alloy*].

It is well-known in the art that hitch components may comprise metal material such as aluminum alloy. For example, Powell discloses a dual level hitch (10) (Figs. 1 and 2) for use in towing, the dual level hitch (10) being received in a hitch receiver (44) of a vehicle (46) and containing such components as horizontal extension bars (12 and 34), a vertical extension bar (26) and a tilting mechanism (20). It is further disclosed: {Col. 6, Lines 25-30} "*For example, the two horizontal extension bars 12 and 34, as well as the vertical extension bar 26 and the tilting mechanism 20, can be constructed from steel, a steel based alloy, a lightweight metal alloy (such as aluminum) or a rugged plastic material.*".

Therefore, considering the disclosure of Powell, it would have been obvious to one having ordinary skill in the art at the time of the invention to make the hitch assembly (44) [*Lloyd's invention*] partially or entirely from a known, suitable metal material such as aluminum alloy to achieve desired performance of the hitch assembly (44) on a particular application while also considering other factors such as cost, design, etc.

**Claims 2 and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Lloyd in view of Klinkman, U.S. Patent No. 5,431,425.

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Lloyd discloses what is discussed above, but *fails to specifically disclose* the hitch pin being comprised of 4140 hot-rolled steel.

It is well-known in the art that hitch components may comprise hitch pins or other types of pins that are made from a strengthened material, such as 4140 steel. For example, Klinkman discloses a retractable trailer hitch receiver apparatus (10) (Figs. 3 and 4) comprising such components as a mounting frame (12) consisting of tubes (14), and bores (22) which receive two pins (80). It is further disclosed: {Col. 6, Lines 44-47} "*The present invention consists of several pieces of square steel tubing, a steel band, grade 8 bolts, and two 4140 stress-proof steel pins 3/4 inches in diameter and 9 1/2 inches long.*"

Therefore, considering the disclosure of Klinkman, it would have been obvious to one having ordinary skill in the art at the time of the invention to make the hitch pin on the hitch assembly (44) [*Lloyd's invention*] from a known, suitable metal material such as 4140 steel to achieve desired performance of the hitch assembly (44) on a particular application while also considering other factors such as cost, design, etc.

**Claims 13 and 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Lloyd in view of Klinkman (*as discussed above*) in further view of Powell, U.S.

Patent No. 6,129,371

Lloyd and Klinkman together disclose what is discussed above, but *fail to specifically disclose* the hitch assembly (44) being entirely comprised of aluminum alloy [*i.e. the U-shaped clevis and coupling tongue comprising aluminum alloy*].

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It is well-known in the art that hitch components may comprise metal material such as aluminum alloy. For example, Powell discloses a dual level hitch (10) (Figs. 1 and 2) for use in towing, the dual level hitch (10) being received in a hitch receiver (44) of a vehicle (46) and containing such components as horizontal extension bars (12 and 34), a vertical extension bar (26) and a tilting mechanism (20). It is further disclosed: {Col. 6, Lines 25-30} *"For example, the two horizontal extension bars 12 and 34, as well as the vertical extension bar 26 and the tilting mechanism 20, can be constructed from steel, a steel based alloy, a lightweight metal alloy (such as aluminum) or a rugged plastic material."*

Therefore, considering the disclosure of Powell, it would have been obvious to one having ordinary skill in the art at the time of the invention to make the hitch assembly (44) [*combined invention of Lloyd and Klinkman*] from a known, suitable metal material such as aluminum alloy to achieve desired performance of the hitch assembly (44) on a particular application while also considering other factors such as cost, design, etc.

### **Conclusion**

**6.** The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: the prior art cited on form PTO-892 relates to hitching devices containing clevises that form an opening into which a towing member (*i.e. belt, chain, rope, etc.*) may be inserted for towing a vehicle.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARC A. SCHARICH whose telephone number is (571) 272-3244. The examiner can normally be reached on M-F 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley Morris can be reached on (571) 272-6651. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

M.A.S. – 4/13/2010

/Marc A. Scharich/  
Patent Examiner  
Art Unit 3611

/LESLEY D MORRIS/  
Supervisory Patent Examiner, Art Unit 3611